

Remarks

I. Introduction

The present application that is pending before the U.S. Patent and Trademark Office, as examined, include one claim, claim 1. The Examiner rejected claim under 35 U.S.C. § 112 for indefiniteness and § 102 for anticipation based on U.S. Patent No. 4,204,015 to Wardlaw et al. (“Wardlaw”). Applicant will demonstrate that both of these grounds of rejection have been traversed with regard to claim 1, as amended, and should not be raised with regard to new claims 2-10.

II. Traverse of the Indefiniteness Rejection

In numbered section 4 of the Office Action, the Examiner rejected claim 1 for the use of the term “thin” in describing the polymer membrane because the Examiner’s position is that this term is indefinite. Per this Amendment, Applicant has amended claim 1 to remove the term “thin.” The removal of the term “thin” overcomes the Examiner’s basis for rejection of claim 1 under 35 U.S.C. § 112, second paragraph. As such, the Examiner should withdraw this basis of rejection.

New claims 2-10 have been added by this amendment. Claims 2-10 do not use the term “thin,” so the Examiner has no basis to raise this indefiniteness rejection against claim 2-10.

III. Traverse of the Anticipation Rejection

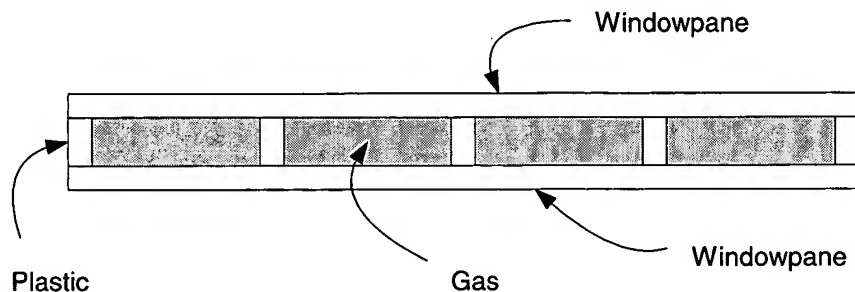
In numbered section 7 of the Office Action, the Examiner rejected claim 1 under 35 U.S.C. § 102 for anticipation based on Wardlaw. In rejecting claim 1 based on Wardlaw the Examiner stated:

Regarding Applicant’s claim 1, Wardlaw discloses thermal membrane comprising a thin polymer membrane (*intermediate layer, col. 2, lines 25-29*) that insulate a heat transfer material (*windowpane structure, col. 1, lines 5-9*) therewith a plurality of through holes (*perforations, col. 2, line 41*) in a predetermined pattern (*figure 1*) and thermal condition and insulating material (*gas, col. 2, line 6*) filling a predetermined pattern of at least a hole to provide increased thermal conductivity to the thermal membrane (*col. 2, lines 3-8*).

Wardlaw that the Examiner has cited to in rejecting claim 1 is being improperly relied on as anticipating reference given that it teaches the opposite of the present invention. The Wardlaw structure is an alleged “windowpane structure which displays improved insulating properties and which has the ability to be cut from a large blank without the sized cut piece losing its insulating

properties.” (Emphasis added.) (Col. 1, lines 5-9) All of the materials that are used in the windowpane structure are for the purpose of thermal insulation not the transfer of heat from a heat generating device to a heat receiving device such as a heat sink.

The Wardlaw structure is the following (See Figure 2 of Wardlaw):



In the structure shown above, the two windowpanes are made of insulating glass. The plastic material disposed between the two windowpanes is also insulating material and not meant to transfer heat from one windowpane to another. If this were not the case, Wardlaw would have used materials such as aluminum for the intermediate layer (in the form of a lattice) that would be known to transfer heat as in the present invention. Finally, the gas that is disposed in the cells shown above also is not heat transferring gas but meant to be insulating gas. In fact, the gas is “a gas of low thermal conductivity to increase the insulation characteristics of the windowpane.” (Emphasis added.) (Col. 2, lines 6-9). The Wardlaw structure and operation is substantially different than those of the present invention.

Claim 1 has been amended to clarify the distinguishing features of the present invention. First, the polymer membrane has been further defined to a flexible membrane that has (i) heat transfer and (ii) electrical insulating properties. These methods separate properties. That is, the polymer membrane is used as a heat transfer medium and then it has electrical insulating properties. Further, the polymer membrane can be disposed between a heat receiving device and a heat generating device that have non-planar surface areas and it will conform to these non-planar surface shapes. The Wardlaw structure does not have this combination of features.

Wardlaw also does not have a heat transfer material in the openings of its plastic lattice structure for the purpose of transferring heat at a greater rate than the membrane. Moreover, there is no teaching or suggestion of Wardlaw having that capability. Accordingly, Wardlaw does not anticipate claim 1, as amended, for at least four reasons.

Applicant has traversed the Examiner's anticipation rejection based on Wardlaw and Applicant requests that this rejection be withdrawn.

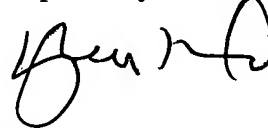
Claims 2-10 depend from claim 1. Therefore, claim 2-10 include all of the features of claim 1 and just add new features to those of claim 1. Thus, claims 2-20 are not anticipated by Wardlaw for the same reasons as claim 1. Accordingly, the Examiner should not raise a rejection to claims 2-10 based on Wardlaw.

IV. Conclusion

Applicant that traversed the Examiner's basis for rejecting claims 1-10 under 35 U.S.C. §112 for indefiniteness and § 102 for anticipation based Wardlaw. Having traversed these rejections, the present application is in condition for allowance. Reconsideration and allowance are respectfully requested.

Date: 7-05-2005

Respectfully submitted.



Wayne M. Kennard
Reg. No. 30,271

WILMER CUTLER PICKERING HALE AND DORR LLP
60 State Street
Boston, MA 02109
617-526-6183
617-526-5000 Facsimile